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EXAMINER
BATES, KEVIN T

ART UNIT	PAPER NUMBER
2456	

NOTIFICATION DATE	DELIVERY MODE
10/31/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/579,388	SUZUKI ET AL.	
	Examiner	Art Unit	
	KEVIN BATES	2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-3,9-31,34-45 and 51-67* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-3,9-31,34-45 and 51-67* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

This Office Action is in response to a communication made on January 12, 2011.

Claims 64-67 are newly added.

Claims 1-3, 9-31, 34-45, and 51-67 are pending in this application.

Claim Rejections - 35 USC § 101

The 35 USC §101 rejection of claims 1-3 and 9-28 is hereby withdrawn in light of the applicant's amendments.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 64-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 64 and 66 recite distributing data to an arbitrary internal application and having data that identifies the arbitrary internal application as the destination. It is unclear as to what the adjective "arbitrary" is providing as a limitation as a claim. The claim seems to indicate that data is distributed to arbitrary or "random" application, however the claim further recites that the arbitrary application is an identified destination, making it no longer arbitrary or random in the context. As result, the meaning of an arbitrary internal application is unclear as claimed in claim 64 and 66.

Claims 65 and 67 contain the same claim language and are rejected under the same rationale as claims 64 and 66.

Response to Arguments

Applicant's arguments filed January 12, 2011 have been fully considered but they are not persuasive.

The applicant argues that Hirai discloses authenticating a user, not authenticating an application as required by the claim language. The examiner disagrees, the claim language recites determining the validity of an operation execution request which includes authenticating using identification information unique to the application. The claim further requires matching the application identification with identification information stored within the electronic apparatus. Hirai teaches validating a request made to the electronic apparatus. This validation process includes identifying and registering an application (¶90-91), determining whether the identified user is allowed to perform the requested operation while using the identified application (¶92-95). As result, Hirai teaches the idea of the operation request being validated include the operation of comparing the identified application with stored information in the external apparatus to determine whether that application is permitted to perform the requested function (¶94).

The applicant argues that Hirai in combination with Haraguchi does not recite applications operating on remote devices requesting the electronic apparatus to perform operations. More particularly, that Haraguchi only teaches services being performed on

the peripherals and not being executed on the remote devices to request operations from the peripheral. The examiner disagrees, Haraguchi teaches a robust system that allows services (i.e. applications as defined in Hirai) to operate and perform any device in the network and most particularly servers remote to the peripherals (Col. 6, ll. 20 – 25). Said services are defined as those that require operation requests onto the peripheral devices (See Fig 11A and Fig 11B). Thus Haraguchi provides a teaching as to how services and applications can be implemented onto dedicated servers to interact and send operation requests to peripherals. Hirai as improved by Haraguchi would allow one of ordinary skill in the art to implement the taught applications in Hirai and move those applications to dedicated external servers for the advantages taught in Haraguichi.

The applicant argues that Hirai in combination with Haraguchi does not disclose the request for an operation by the application includes specifying resources. The examiner disagrees, Hirai teaches that request from "upper layers" include determining whether specified resources needed to perform the requests are available (¶42). It is clear from the disclosure that Harai's applications are upper layer entities which are performing said requests (See Fig 1, elements 111-116). As result, Hirai teaches the requests from the applications request specified and necessary hardware resources to be allocated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 9-11, 13-31, 34-35, 37-45, 51-53, and 55-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai (20040021890) in view of Haraguchi (7102777).

Regarding claims 1, 29, and 43, Hirai teaches an electronic apparatus for executing an operation using an application, comprising:

communicating unit configured to communicating with an external apparatus via a communication line (¶75);

a storage unit configured to store identification information unique to one of a plurality of applications (¶92);

a processing unit compled to the communicating unit, the storage unit, and the plurality of hardware resources (Fig 2, element 302)

controlling unit for executing an operation using an application by communicating with the external apparatus by communicating with the external apparatus by the communicating unit (¶77); an operation execution request that is issued by the application and requests execution of the operation using the application (¶126), the operation providing an image processing function using at least one of the plurality of hardware resources specified by the application (¶41-42);

authenticating unit configured to carry out, using authentication information that is added to the operation execution request (¶91-94), an authentication process to confirm validity of the operation execution request when the communicating uint receives the operation execution request from the external apparatus; the authentication information including identification information unique to the application; and the authenticating means confirms that the operation execution request is valid if the identification information matches identification information that is stored in the storage unit (¶92) and

operation execution permitting unit for permitting execution of the operation if the authenticating unit confirms that the operation execution request is valid (¶91-92).

Hirai teaches a plurality of applications running on the electronic apparatus, but does not explicitly indicate that those applications can be within the external apparatus or that requests from the applications are received by the communications unit.

Haraguchi teaches an electronic apparatus that applications or services available to that apparatus can be running within the electronic apparatus or alternatively running on a separate server in the network (Col. 5, lines 16 - 21; Col. 3, lines 18 - 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made was to allow the electronic apparatus in Hirai to interface with service providers to access the external services or applications running on those service provides which would allow the external applications to make requests over the network to the peripherals of Hirai and would result in additional functionality to be added to the multipurpose peripheral without having to individually replace or update each MFP.

Regarding claims 2, 30, and 44, Hirai teaches the electronic apparatus as claimed in claims 1, 29, and 43.

Hirai does not explicitly indicate device start notification sending means for sending a start notification of the electronic apparatus to the external apparatus by the communicating means; and application information registering means for registering information related to a usable application that is added to an application usability notification, when the application usability notification from the external application is received by the communicating means in response to the start notification sent by the device start notification sending means.

Haraguchi teaches device start notification sending means for sending a start notification of the electronic apparatus to the external apparatus by the communicating means; and application information registering means for registering information related to a usable application that is added to an application usability notification, when the application usability notification from the external application is received by the communicating means in response to the start notification sent by the device start notification sending means (Fig 3, Col. 3, lines 51 – 56).

Regarding claims 3, 30, and 45, Hirai in combination with Haraguchi teaches the electronic apparatus as claimed in claims 2, 30, and 44, wherein the device start notification sending means sends the start notification to the external apparatus when a power of the electronic apparatus is turned ON (Haraguchi, Fig 3, Col. 3, lines 51 – 56, where the electronic apparatus can only send messages if it is currently powered on and operating).

Regarding claims 9 and 51, Hirai teaches the electronic apparatus as claimed in claims 1 and 43, wherein:

the authentication information added to the operation execution request includes identification information unique to the application and type information indicating a type of the application (¶90-95);

the identification information stored in the storage unit includes type information (¶92); and

the authenticating means confirms that the operation execution request is valid if the identification information, including the type information added to the operation executon request, matches the identification information, including the type information that is stored in the storage unit (¶90-95).

Regarding claims 10, 34, and 52, Hirai teaches the electronic apparatus as claimed in claims 1 29, and 43, further comprising: identification information setting means for setting identification information unique to the application with respect to which an access to the electronic apparatus is permitted or rejected; and operation execution permitting or rejecting means for permitting or rejecting the execution of the operation requested by the operation execution request, if identification information unique to the application and added to the operation execution request matches the identification information set by the identification information setting means (¶90-95).

Regarding claims 11, 35, and 53, Hirai teaches the electronic apparatus as claimed in claims 1 29, and 43, further comprising: line type judging means for judging a type of communication line via which the operation execution request is received by the

communicating means; and operation execution permitting or rejecting means for permitting or rejecting the execution of the operation requested by the operation execution request depending on a judgment result of the line type judging means (¶135-137).

Regarding claims 13, 37, and 55, Hirai teaches the electronic apparatus as claimed in claims 1, 29, and 43.

Hirai does not explicitly indicate device usability notification sending means for sending to the external apparatus a usability notification indicating a usability of the electronic apparatus when the communicating means receives a connection request from the external apparatus, wherein the controlling means executes the operation when an operation execution request that requests execution of the operation using the application within the external apparatus is received from the external apparatus by the communicating means in response to the usability notification sent to the external apparatus by the device usability notification sending means.

Haraguchi teaches an electronic apparatus including device usability notification sending means for sending to the external apparatus a usability notification indicating a usability of the electronic apparatus when the communicating means receives a connection request from the external apparatus, wherein the controlling means executes the operation when an operation execution request that requests execution of the operation using the application within the external apparatus is received from the external apparatus by the communicating means in response to the usability notification

sent to the external apparatus by the device usability notification sending means (Fig 3, Col. 3, lines 51 – 56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made was to allow the electronic apparatus in Hirai to interface with service providers to access the external services or applications running on those service provides which would additional functionality to be added to the multipurpose peripheral without having to individually replace or update each MFP.

Regarding claims 14, 38, and 56, Harai teaches the electronic apparatus as claimed in claims 13, 37, and 55, further comprising: application information registering means for registering information related to a usable application that is added to the connection request, when the connection request from the external application is received by the communicating means (¶91).

Regarding claims 15, 39, and 57, Harai teaches the electronic apparatus as claimed in claim 13, further comprising: authenticating means for carrying out an authentication process to confirm validity of the connection request when the communicating means receives the connection request from the external apparatus; and transmission permitting means for permitting sending of the usability notification if the authenticating means confirms that the connection request is valid (¶90-95).

Regarding claims 16 and 58, Harai teaches the electronic apparatus as claimed in claims 15 and 57, wherein the authenticating means carries out the authentication process using authentication information that is added to the connection request (¶90-95).

Regarding claims 17 and 59, Harai teaches the electronic apparatus as claimed in claims 16 and 58, wherein: the authentication information is identification information unique to the application; and the authenticating means confirms that the connection request is valid if the identification information matches identification information that is registered in advance (¶90-95).

Regarding claims 18, 40, and 60, Harai in combination with Haraguchi teaches the electronic apparatus as claimed in claims 13, 34, and 55, wherein the communicating means carries out a communication sequence for confirming validity of a connection request according to a protocol that is predetermined between the electronic apparatus and the external apparatus when the connection request is received from the external apparatus, and further comprising: authenticating means for carrying out an authentication process to confirm validity of the connection request from the communication sequence carried out by the communicating means; and transmission permitting means for permitting the device usability notification sending means to send the device usability notification if the authenticating means confirms that the connection request is valid (Harai, ¶90-95).

Regarding claims 19 and 61, Harai in combination with Haraguchi teaches the electronic apparatus as claimed in claims 18 and 60, wherein the authenticating means confirms that the connection request is valid if the communication sequence is in accordance with the protocol (Haraguchi, Col. 4, lines 3 - 15).

Regarding claims 20, 41 and 62, Harai teaches the electronic apparatus as claimed in claims 13, 34, and 55, further comprising: first authenticating means for

carrying out a first authentication process to confirm validity of a connection request when the communicating means receives the connection request from the external apparatus; transmission permitting means for permitting the device usability notification sending means to send the device usability notification if the first authenticating means confirms that the connection request is valid; second authenticating means for carrying out a second authentication process to confirm validity of the operation execution request when the communicating means receives the operation execution request from the external apparatus in response to the device usability notification sent by the device usability notification sending means; and operation execution permitting means for permitting execution of the operation if the second authenticating means confirms that the operation execution request is valid (¶90-95, wherein the second authentication is the use restriction imposed on the user and application before allowing any operations by the applications to be performed).

Regarding claims 21, 42, and 63, Harai in combination with Haraguchi teaches the electronic apparatus as claimed in claims 13, 34, and 55, wherein the communicating means carries out a communication sequence for confirming validity of a connection request according to a protocol that is predetermined between the electronic apparatus and the external apparatus when the connection request is received from the external apparatus, and further comprising: first authenticating means for carrying out a first authentication process to confirm validity of the connection request from the communication sequence carried out by the communicating means (Harai ¶90-91, Haraguchi, Col. 4, lines 3 - 15); and transmission permitting means for

permitting the device usability notification sending means to send the device usability notification if the first authenticating means confirms that the connection request is valid; second authenticating means for carrying out a second authentication process to confirm validity of the operation execution request when the communicating means receives the operation execution request from the external apparatus in response to the device usability notification sent by the device usability notification sending means; and operation execution permitting means for permitting execution of the operation if the second authenticating means confirms that the operation execution request is valid (¶90-95, wherein the second authentication is the use restriction imposed on the user and application before allowing any operations by the applications to be performed).

Regarding claims 22-24, and 27, Hirai in combination with Haraguchi teaches an electronic apparatus system in which the electronic apparatus of claims 1, 2, 13, and 14 and the external apparatus are communicatably coupled via a communication line, said external apparatus comprising: application storing means; an other communicating means for communicating with the electronic apparatus via the communication line; and application usability notification sending means for adding information that is related to the usable application and is stored in the application storing means to the application usability notification before sending the application usability notification to the electronic apparatus by the other communicating means, when the other communicating means receives the start notification from the electronic apparatus (Col. 3, line 46 – Col. 4, line 15).

Regarding claim 25, Harai in combination with Haraguchi teaches the electronic apparatus system as claimed in claim 24, wherein the connection request sending means sends the connection request to the electronic apparatus by the other communicating means when starting the application (Haraguchi, Col. 4, lines 3 – 15).

Regarding claim 26, Harai in combination with Haraguchi teaches the electronic apparatus system as claimed in claim 24, wherein said external apparatus further comprises operation means, and the connection request sending means sends the connection request to the electronic apparatus by the other communicating means in response to an operation by the operation means (Haraguchi, Col. 4, lines 3 – 15).

Regarding claim 28, Harai in combination with Haraguchi teaches an electronic apparatus system in which the electronic apparatus of claim 13 and the external apparatus are communicatably coupled via a communication line, said external apparatus comprising: operation means; application storing means; an other communicating means for communicating with the electronic apparatus via the communication line; connection request sending means for sending a connection request to the electronic apparatus by the other communicating means; function inquiring means for inquiring an existence of a function specified by the operation means to the electronic apparatus by the other communicating means, when the usability notification is received from usable electronic apparatuses in response to the connection request sent by the connection request sending means; device selecting means for selecting an electronic apparatus capable of realizing the specified function from the usable electronic apparatuses, when an inquiry result is received in response

to the inquiring made by the function inquiring means; and operation execution request sending means for sending the operation execution request that requests execution of the operation using a usable application stored in the application storing means, by the other communicating means, to the electronic apparatus selected by the device selecting means (Harai, Col. 3, line 46 – Col. 4, line 15, Haraguchi, Col. 5, lines 53 – Col. 6, line 12).

Regarding claims 64 and 66, Harai teaches the electronic apparatus as claimed in claims 1 and 43, further comprising: a plurality of internal applications (¶50), wherein the controlling unit is configured to further execute a second operation using one of the plurality of internal applications within the electronic apparatus when a second operation execution request that requests execution of the second operation using the one of the plurality of internal applications is generated within the electronic apparatus (¶58-60), and

the processing unit further includes

an application selecting part configured to distribute data, including commands, received from the controlling unit to a destination based on information added to the data and identifying the destination (¶45, 51), and

the application selecting part distributing the data to the first application via the communicating unit if the information added to the data identifies the first application as the destination, and distributing the data to an arbitrary internal application within the electronic apparatus if the information added to the data identifies the arbitrary internal application as the destination (¶45, 51).

Hirai does not explicitly indicate sending messages to external applications over the communications network if the destination of the message is an external application.

Haraguchi teaches an electronic apparatus that applications or services available to that apparatus can be running within the electronic apparatus or alternatively running on a separate server in the network (Col. 5, lines 16 - 21; Col. 3, lines 18 - 22). Where messages can be transmitted from the peripheral devices to the external applications (Col. 3, ll. 18 – 27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made was to allow the electronic apparatus in Hirai to interface with service providers to access the external services or applications running on those service provides which would allow the external applications to make requests over the network to the peripherals of Hirai and would result in additional functionality to be added to the multipurpose peripheral without having to individually replace or update each MFP.

Regarding claims 65 and 67, Hirai in combination with Haraguchi teaches the electronic apparatus as claimed in claims 64 and 66, wherein: the storage unit further stores the plurality of internal applications (See Hiari, ¶50); and the application selecting part sends the external application received via the communicating unit to the controlling unit (See Haraguchi, Col. 3, ll. 18 – 27), and sends each of the plurality of internal applications received from the storage unit to the control unit (see Hiari, ¶45,51).

Claims 12, 36, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harai, Haraguchi, and further in view of Parry (7542160).

Regarding claims 12, 36, and 54, Harai teaches the electronic apparatus as claimed in claim 4, further comprising: execution request judging means for judging whether the operation execution request is a normal request or an abnormal request (¶90-92).

Harai does not explicitly indicate abnormality counting means for counting a number of times the abnormal request is judged by the execution request judging means; and operation execution rejecting means for rejecting the execution of the operation requested by the operation execution request if a counted value counted by the abnormality counting means exceeds a predetermined value.

Parry teaches a system for validating access to a electronic apparatus including abnormality counting means for counting a number of times the abnormal request is judged by the execution request judging means; and operation execution rejecting means for rejecting the execution of the operation requested by the operation execution request if a counted value counted by the abnormality counting means exceeds a predetermined value (Col. 7, lines 36 – 46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Parry's teaching of a predetermined number of allowed authentication attempts in Harai's system to prevent an unauthorized user to attempt to guess a password through brute force method of password attempts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN BATES whose telephone number is (571)272-3980. The examiner can normally be reached on M-F 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KEVIN BATES/
Primary Examiner, Art Unit 2456